Delaware Unified English Braille Implementation Plan

May 2018

Unified English Braille (UEB) And The Braille Authority of North America (BANA) Background Timeline

On November 2, 2012, the Braille Authority of North America (BANA) adopted Unified English Braille (UEB) as an official braille code to replace English Braille American Edition (EBAE) in the United States. The formal motion is as follows "Therefore it is moved that the Braille Authority of North America (BANA) adopts the Unified English Braille to replace the current English Braille American Edition in the United States while maintaining the Nemeth Code for Mathematics and Science Notation, 1972 Revision; the Music Braille Code 1997; and the International Phonetic Alphabetic Braille Code, 2008. The official braille codes for the United States will be Unified English Braille, Nemeth Code for Mathematics and Science Notation, 1972 Revision and published updates; Music Braille Code, 1997; and The IPA Braille Code, 2008."

The implementation date for UEB in the United States as established by BANA is January 4, 2016. BANA developed an implementation timeline that includes four phases. BANA's implementation plan is as follows:

2013 – Information Year

Development and dissemination of UEB information and gathering of constituent input.

2014 – Infrastructure Year

Procurement and production of UEB braille materials and development of training materials.

2015 – Instructional Year

Readers, producers, and educators will become proficient in UEB

2016 – Implementation Year

All new transcriptions will be produced in UEB. Educators will teach the UEB code. Devices and software will fully and accurately incorporate UEB. UEB is to be the official braille code beginning January 4, 2016.

Braille Authority of North America (BANA)

BANA is the organization charged with promoting and facilitating the uses, teaching, and production of braille. BANA is comprised of representatives from eighteen different organizations of and for people who are blind and visually impaired, and meets twice a year to promulgate rules, make interpretations, and render opinions and decisions pertaining to all braille codes and guidelines for the provisions of literary and technical materials and related forms and formats of embossed materials now in existence or to be developed in the future for use in North America. The mission of the Braille Authority of North America (BANA) is to assure literacy for tactile readers through the standardization of braille and/or tactile graphics.

Unified English Braille (UEB)

Unified English Braille (UEB) is the revised braille code used internationally for transcribing braille in the English language. UEB is based on the previous international literary braille code, English Braille American Edition (EBAE), with the same alphabet and most of the same contractions and punctuation. UEB is a complete braille code encompassing revisions and extensions to EBAE that include symbols for technical materials (e.g., science, technology, engineering, and mathematics). UEB is designed to be less ambiguous, with fewer exceptions and rules. Literary materials transcribed in UEB are easily read by most braille readers who are familiar with EBAE. Currently, UEB is an official braille code in eight English-speaking countries, including the United States.

UEB Implementation in Delaware

Careful consideration was given regarding the need for appropriate information, training, and resources to continually support the current and future braille instruction and literacy needs of students who are blind or visually impaired.

The resulting determination was for the statewide implementation of UEB as a complete braille code for literary and technical instructional materials (e.g., reading, writing, mathematics, science, and technology) for braille learners across all grade levels (K-12).

Factors that were considered for the UEB implementation process included:

- · disseminating information;
- training for teachers and braille transcribers;
- aligning braille instruction to support the diverse needs of students who are blind or visually impaired, including those with multiple disabilities;
- producing instructional materials and statewide assessments;
- supporting forward and backward translation (e.g., print to braille and braille to print) for use in all digital environments; and
- preparing students for post-secondary education, independence, and competitive employment in a global society.

The UEB transition process will occur gradually over several years, with the anticipated completion of the full transition to UEB for braille instruction and the transcription of instructional materials and statewide assessments by the end of the 2020-2021 school year.

Throughout the transition period, some instructional materials and statewide assessments will continue to be available in EBAE and Nemeth Code to address individual student needs, as determined appropriate by the Individualized Education Program (IEP) team.

UEB Implementation Timeline

In response to the Braille Authority of North America's adoption of the Unified English Braille Code the Delaware Division for the Visually Impaired will proceed as follows:

	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Braille Code - Use & Production	EBAE & Nemeth	EBAE & NemethUEB Literary per IEP	UEB Literary & NemethUEB Math per IEP	UEB Literary & NemethUEB Math per IEP	UEB Literary, Math & Technical
Statewide Assessments - Braille Code	EBAE & Nemeth	EBAE & NemethUEB Literary per IEP	UEB Literary & NemethUEB Math per IEP	UEB Literary & NemethUEB Math per IEP	• UEB Literary, Math & Technical
Training - Production Staff	UEB Literary	Literary UEB Certified2 Day UEB Training	 Accessible Document Creation & Remediation Accessible NoteTakers 	 Accessible Document Creation & Remediation (Advanced) 	Workgroup Session Trainings as needed
Training - Professional & Paraprofessional Staff		 UEB Training Screen Reading Software Accessible Document Creation to a UEB Numeric Mode 	 UEB Math & Technical (Refresher & Advanced) Accessible NoteTakers Braille Translation Software Tools 	UEB Math & Technical (Advanced)	
Instruction — Students		UEB (Introduction)	 UEB Literary Introduction/ Instruction UEB Math Introduction/ Instruction 	 UEB Math Instruction UEB Science & Technical Introduction 	UEB Science & Technical Instruction

Resources

• Braille Authority of North America

http://brailleauthority.org

Overview of Changes from Literary Braille to UEB

Informational document from BANA that highlights the most significant changes in UEB that will be noted by the general reader of braille.

http://www.brailleauthority.org/ueb/overview changes ebae ueb.html

Provisional Guidance for Transcription Using Nemeth Code in UEB Contexts

This method of switching between the Nemeth Code and Unified English Braille has been developed to ensure the continued viability of the use of the Nemeth Code for mathematics.

http://www.brailleauthority.org/mathscience/math-science.html

The Hitchhiker's Guide to UEB

"The Hitchhiker's Guide to UEB" was written for children learning UEB as a quick reference tool for all those supporting children learning UEB.

http://www.banzat.org.nz/documents/HHGMaths.pdf

UEB Rulebook

Full UEB rulebook for braille transcribers from the International Council on English Braille (ICEB).

http://www.iceb.org/ueb.html

UEB Curriculum for Braille Students

This free resource presents a series of 10 lessons for students who are making the transition from EBAE to UEB. Developed by Catherine Summ and Suzanne Cappiello, the lessons are available on the "Paths to Literacy" website from Perkins.

http://www.pathstoliteracy.org/blog/ueb-curriculum-braille-students

UEB Chart from Duxbury

Quick UEB reference sheet from the makers of Duxbury Braille Translation Software.

http://duxburysystems.com/images/ueb_black.pdf

UEB Chart from Aroga Technologies

Quick UEB reference sheet from Aroga Technologies.

https://canasstech.com/products/unified-english-braille-chart

Resources – Professional Training

The Hadley School for the Blind

The mission of The Hadley School for the Blind is to promote independent living through lifelong, distance education programs for individuals who are blind or visually impaired, their families and blindness service providers.

http://hadley.edu/UEBTransition.asp

UEB Online

A training program for sighted people, consisting of 30 lessons that are subdivided into two modules. Renwick Centre offers certificates (\$40) for each of the two modules.

http://uebonline.org/getting-started/course-outline/

Introduction to Unified English Braille

Wisconsin Center for the Blind and Visually Impaired.

http://www.wcbvi.k12.wi.us/outreach/ueb-introduction

• Unified English Braille Online Training (UEBOT)

Northern Illinois University's online course designed for people proficient in English Braille, American Edition (EBAE).

http://uebot.niu.edu

The ABCs of UEB

Authored by Constance Risjord, this document outlines the major differences between English Braille, American Edition (EBAE) and UEB.

http://brailleauthority.org

Unified English Braille Australian Training Manual 2016

A series of lessons and practice exercises by which teachers, transcribers and parents can learn UEB.

http://brailleaustralia.org

New Zealand UEB Manual

http://brailleauthority.org

Resources – Transcriber Training

Transcriber's UEB Self-Directed Course

Self-directed course from CNIB for transcribers, proofreaders and teachers of braille reading to children and adults.

http://www.cnib.ca/en/living/braille/Pages/Braille-Courses.aspx

NLS Braille Transcriber Course

Information about the National Library Service for the Blind and Physically Handicapped (NLS) braille transcriber course.

https://nfb.org/braille-transcribing

Examination for Letter of Proficiency in Unified English Braille

Available only for certified transcribers who wish to add a Letter of Proficiency in UEB.

www.nfb.org/ueb-resources

UEB Implementation Plan Monitoring

Ongoing monitoring and review will occur throughout the UEB transition process with revisions to the implementation plan, as necessary.

Information will continue to be disseminated to designated school division administrators and posted to the Division for the Visually Impaired's website.

Contact Information

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